

REMARKS

Claims Status

Claims 10, 19, 22 and 23 are currently amended. Regarding the amendment to claim 22, written support for the phrase “having two sequences that each encode EPSPS” is in paragraph 48 of the specification and Figure 2, both of which disclose the incorporation of two aroA:CP4 (EPSPS) coding regions in the DNA insert. Written support for the language concluding claims 22 and 23 relating to the genomic DNA-insert junction sequences SEQ ID NOs:1-4 is in paragraphs 7 and 8 of the specification. Claims 10 and 19 are amended to simplify the language thereof by reciting the plants covered in claims 21-23.

Claims 1-9, 12-18, 20, 28-32 and 35-37 are cancelled. Of these, claims 16 and 35-37 are currently cancelled.

Claim 39 is new. This claim recites the subject matter of claim 37 (currently cancelled) in an independent manner.

Applicants kindly request the entry of these amendments, as they do not introduce any new issues that would require further consideration and/or search of the claims.

Claim 21 is allowed in the pending Office Action. Applicants appreciate this notification of allowable subject matter.

Applicants respectfully submit that the foregoing amendments to the claims do not introduce any new subject matter to the application. With the present amendment, there are fourteen claims pending, namely 10, 11, 19, 21-27, 33, 34, 38 and 39.

Summary of Interview with Examiner

An interview with the Examiner concerning the instant application was requested by Applicants' representative, and took place telephonically on October 31, 2007. Applicants appreciate the time and consideration the Examiner generously afforded in discussing this case.

To summarize the substance of the interview, Applicants' representative requested the Examiner's comments concerning how the claims could be modified to overcome the pending USC § 112 (first paragraph) rejections, and consequently the USC § 103 rejection (refer to below comments). In part of the discussion, Applicants' representative proposed altered claim language that further relates how junction sequences SEQ ID NOs:1 and 2 are specific to the MON 88913 genetic event, and pointed to paragraph 7 of the specification which relates this feature. This proposed claim language is recited in claim 22 as currently amended. Applicants also explained that, because of this specificity, SEQ ID NOs:1 and 2 – *as recited in claim 22* – would not be present in other cotton plants transformed with the construct used to prepare the original MON 88913 genetic event, even if SEQ ID NOs:1 and 2 were placed on the ends of such a transforming construct. In this latter case, SEQ ID NOs:1 and 2 in their entirety would instead only be considered part of the insert, and hence would not alone constitute junction sequences.

Aside from discussing junction sequences, the Examiner raised the issue regarding insert structure, suggesting for example that an allowable claim may recite insert components. Alternatively, certain of the Examiner's remarks were drawn to the idea of further reciting that the claimed plant's genomic DNA is capable of producing an amplicon of an approximate size using certain primers.

Claim Objections

Claim 37 is objected to by the Examiner for allegedly not further limiting the subject matter of claim 21 to which claim 37 depends. Claim 37 is cancelled without prejudice; therefore, this claim objection is moot. New claim 39 is written to recite the subject matter of claim 37 in independent form.

Claim Rejections – 35 USC § 112 (first paragraph), Written Description

Claims 10, 11, 16, 19, 22-27, 33, 34, 36 and 38 stand rejected under 35 USC 112, first paragraph, as lacking adequate written description in the specification.

The Examiner asserts in the Office Action (page 3) that the claims are directed to any glyphosate-tolerant cotton plants – not necessarily those having the MON 88913 event:

...the instantly rejected claims are not directed specifically to an event MON88913 cotton plant, but read broadly on transgenic cotton plants, and method of using, having a glyphosate tolerance transgene located between two 20 base pair sequence (*sic*) (SEQ ID NO: 1 and 2).

Applicants respectfully rebut this statement. In the above scenario, SEQ ID NOs:1 and 2 would be considered part of the transgene insert. The claims as currently amended require that SEQ ID NOs:1 and 2 span the junctions between the insert and the cotton genomic DNA; therefore, SEQ ID NOs:1 and 2 as recited contain both insert DNA and cotton genomic DNA.

Said another way, a cotton plant transformed with a construct as envisioned in the above quote would not represent an example of the claimed subject matter. Consider for example the transformation of a cotton plant with an EPSPS construct having SEQ ID NOs:1 and 2 at each end, respectively. Upon insertion into the genome, the construct would have insert-genome junction sequences that are different from those of the insert as recited in the claims.

It should be understood from the above discussion that the genetic event in the cotton plant recited in the claims is specific. Consequently, the requirement listed in the Office Action (page 4) that “wherein there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus (see MPEP 2163)” does not readily apply to the claimed subject matter. The originally produced plant and its transgenic descendents constitute the only reasonably possible examples that can embody the claimed plant; such plants are disclosed in the specification.

In view of the above amendments and remarks, Applicants respectfully submit that the pending claims have written description in the specification.

Claim Rejections – 35 USC § 112 (first paragraph), Enablement

Claims 10, 11, 16, 19, 22-27, 33, 34, 36 and 38 stand rejected under 35 USC 112, first paragraph, as lacking enablement by the specification.

Further to the above remarks regarding written description, Applicants submit that the claimed invention can be easily practiced by skilled artisans with little or no experimentation. For example, all that is required is the acquisition of seeds containing the MON 88913 genetic event from a descendent plant or from the ATCC, where sample seeds are deposited under accession number PTA-4854. Determining whether or not seeds from a descendent plant carry the event is a matter of performing any number of well-known sequence analyses. These analyses would minimally entail determining whether plants grown from the seeds comprise SEQ ID NO:1 and 2. Once these junction sequences are identified, further analysis could include testing for the presence of two EPSPS-encoding sequences between the junctions. Given the availability of the claimed subject matter and the ease of detection thereof, there is no reason for skilled artisans to attempt producing the claimed cotton plant *de novo*, nor would skilled artisans be inclined to do so.

In view of the above amendments and remarks, Applicants respectfully submit that the pending claims are completely enabled.

Claim Rejections – 35 USC § 103

Claims 10, 11, 16, 19, 22-27, 33, 34, 36 and 38 stand rejected under 35 USC 103 as being obvious over Anderson et al. (U.S. Patent No. 6,573,437).

The Examiner does not deem Applicants' previous argument in the October 27, 2006 Response regarding non-obviousness to be persuasive. The rationale for maintaining this

rejection stems from the Examiner's interpretation of the claims to read on any transgenic cotton plant "having a glyphosate tolerance transgene located between two 20 base pair sequence (*sic*) (SEQ ID NO: 1 and 2)" (Office Action, page 6).

As discussed in the above remarks, the genetic event recited in the claims is specific. Therefore, the only reasonably possible embodiments of the claimed cotton plant are the originally produced plant and its transgenic descendents that have the MON 88913 event. Anderson does not disclose or suggest these particular compositions. Given this lack of direction, as well as the level of unpredictability in this art, Applicants respectfully assert that the pending claims are not obvious.

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Aside from the fee for a one-month extension of time for responding to the pending Office Action, Applicants do not believe that any other fee is due in relation to this response. However, the Commissioner is hereby authorized to charge any underpayment of fees to Howrey LLP Deposit Account 08-3038/11899.0239.PCUS00. In order to facilitate examination, the Examiner is invited to contact the undersigned agent to discuss this response.

Respectfully submitted,



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